

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

ARLINGTON INDUSTRIES, INC.,	:	CIVIL ACTION NO. 3:01-CV-0485
	:	
Plaintiff	:	(CONSOLIDATED)
	:	
v.	:	(Judge Conner)
	:	
BRIDGEPORT FITTINGS, INC.,	:	
	:	
Defendant	:	

BRIDGEPORT FITTINGS, INC.,	:
	:
Consolidated Plaintiff	:
	:
v.	:
	:
ARLINGTON INDUSTRIES, INC.,	:
	:
Consolidated Defendant	:

MEMORANDUM

This is a consolidated patent infringement suit in which Arlington Industries, Incorporated (“Arlington”) accused Bridgeport Fittings, Incorporated (“Bridgeport”) of infringing claim 8 of United States Patent Number 5,266,050 (the “050 patent”) and Bridgeport sought a declaratory judgment of non-infringement. On September 25, 2009, a jury returned a verdict of infringement and breach of contract in Arlington’s favor. (See Doc. 632.) Presently before the court are a total of ten post-trial motions seeking various relief. (See Docs. 640-42, 644-49, 747.) In this memorandum, the court will address Bridgeport’s renewed motion (Doc. 647) for judgment as a matter of law and its motion (Doc. 642) for a new trial.

I. Relevant Background & Procedural History

Arlington and Bridgeport manufacture and design metallic and non-metallic electrical conduit fittings, which are used to connect electrical wiring and cable. In 1992, Arlington developed a new type of fitting, intended to replace previous units whose installation required the use of two hands to screw the device into an electrical junction box.¹ This new connector featured a circular spring metal adaptor, to which at least two outwardly sprung members were attached at the trailing end. When the adaptor was inserted into the knockout hole of an electrical junction box, its outwardly sprung members locked the adaptor into place. Thus, Arlington's connector allowed a user to quickly connect the device to a junction box using one hand instead of two, thereby reducing installation time and associated labor costs. Arlington eventually obtained several patents on this product, including, *inter alia*, the '050 patent.²

In 1999, Bridgeport introduced its own product line of quick-connect fittings called the "Snap-In" and "Speed-Snap" fittings. Two years later, Arlington sued Bridgeport, arguing that the Snap-In and Speed-Snap fittings infringed the '050 patent. The litigation proceeded for three years only to settle on the eve of trial. Bridgeport and Arlington entered into a consent decree on April 7, 2004, wherein

¹ An electrical junction box is used to run multiple conductors in two or more directions, allowing power to flow simultaneously to various electrical devices.

² The parties are familiar with the underlying factual record—which is voluminous—and therefore, the court will set forth only those facts which are relevant to the court's analysis of the pending motions.

Bridgeport (1) stipulated to the '050 patent's validity, (2) admitted that its Snap-In and Speed-Snap fittings infringed the '050 patent, and (3) submitted to entry of a permanent injunction prohibiting it from making, using, selling, offering for sale, or importing the infringing products or "any colorable imitation of such products." (See Doc. 270.) A stipulation of dismissal was entered on April 15, 2004, and the matter was thereafter closed. (Doc. 251.)

In September 2005, Bridgeport designed a new product line of electrical fittings, which it denominated the "Whipper-Snap." Several months later, Arlington notified Bridgeport that various models in its Whipper-Snap line infringed claim 8 of the '050 patent. Bridgeport responded by filing a suit for declaratory judgment of non-infringement on December 19, 2005. This matter was initially assigned to the Honorable A. Richard Caputo. (See Bridgeport Fittings, Inc. v. Arlington Indus., Inc., No. 3:05-CV-2622 (M.D. Pa.), Dkt. No. 1.) In its complaint for declaratory judgment, Bridgeport averred that its Whipper-Snap products were "substantially and materially different" from the Snap-In and Speed-Snap fittings, and requested a judgment of non-infringement for the products designated by catalog numbers 38ASP, 380SP, 841SP, 846SP, 850SP, 8400SP, GF38SP, SG38ASP, and SG38SP.

On February 1, 2006, Arlington countersued, contending that the nine products identified in Bridgeport's complaint infringed its '050 patent, and that Bridgeport was in breach of the consent decree agreed-to by the parties in 2004. (See Bridgeport Fittings, Inc. v. Arlington Indus., Inc., No. 3:05-CV-2622 (M.D. Pa.),

Dkt. No. 18 ¶¶ 9, 18-22.) Arlington simultaneously moved to transfer the declaratory judgment action to the undersigned, a motion which Judge Caputo granted on February 6, 2006, (see id., Dkt. No. 19.) In an order dated April 6, 2006, the undersigned consolidated the 2005 declaratory judgment action with Arlington’s earlier suit for infringement, and reopened the above-captioned matter. (Doc. 267.)

On May 31, 2006, Arlington filed a separate patent infringement suit, alleging that two of Bridgeport’s Whipper-Snap connectors—catalog numbers 3838ASP and 3838SP—were infringing United States Patent Number 6,521,831 (the “831 patent”). This case was assigned to Judge Caputo, presumably because it concerned a distinct patent and different products. (See Arlington Indus., Inc. v. Bridgeport Fittings, Inc. (“Arlington II”), 3:06-CV-1105 (M.D. Pa.), Dkt. No. 1.) On June 27, 2006, Arlington amended its complaint in Arlington II, alleging that connector models 3838ASP and 3838SP (hereinafter “the duplex connectors”) also infringed the ‘050 patent. (Arlington II, Dkt. No. 3 ¶¶ 10-14.) Although infringement of the ‘050 patent was now an issue in both lawsuits, neither party moved to consolidate Arlington II with the above-captioned action, and the matters proceeded on distinct, but parallel tracks. Whether this failure to seek consolidation was simply an oversight or an intentional, strategic decision, it is without question the dangling thread that unraveled a myriad of post-trial and, presumably, appellate issues.

The gravamen of the instant matter is the meaning and application of claim 8 of the ‘050 patent. In its entirety, the claim reads:

A quick connect fitting for an electrical junction box comprising:

a hollow electrical connector through which an electrical conductor may be inserted having a leading end thereof for insertion in a hole in an electrical junction box;

a circular spring metal adaptor surrounding said leading end of said electrical connector which has a leading end, a trailing end, and an intermediate body;

at least two outwardly sprung members carried by said metal adaptor near said trailing end of said adaptor which engage the side walls of the hole in the junction box into which said adaptor is inserted;

at least two spring locking members carried by said metal adaptor that spring inward to a retracted position to permit said adaptor and locking members to be inserted in a hole in an electrical junction box and spring outward to lock said electrical connector from being withdrawn through the hole; and

an arrangement on said connector for limiting the distance said connector can be inserted into the hole in the junction box.

(Doc. 384, Ex. A col. 10.) On February 25, 2008, the court issued a Markman order and held that (1) “‘Circular spring metal adaptor’ means ‘an adaptor made of spring metal that has circular cross sections’; and (2) “‘Outwardly sprung members carried by said metal adaptor near said trailing end of said adaptor’ means ‘members bent outward at an angle relative to the normal plane of the metal adaptor that are part of said adaptor with a portion of each member located near said trailing end of said adaptor.’” (Doc. 376.)

Subsequent to the court’s claim construction, the infringement dispute focused upon claim 8’s limitation that the quick-connect fitting possess “at least two outwardly sprung members” attached to its spring metal adaptor. Indeed,

Bridgeport stipulated that its Whipper-Snap products contained each limitation of claim 8 except the “outwardly sprung members” limitation. (See Doc. 383 ¶ 5.)

Each of Bridgeport’s Whipper-Snap connectors features at least four tensioning tangs attached to the leading end of the adaptor. Arlington attempted to prove that at least two of these tangs were “outwardly sprung,” or, more specifically, that they were “bent outward at an angle relative to the normal plane of the adaptor.” In support of its motion for summary judgment, Arlington’s infringement expert, Christopher Rahn (“Rahn”), proffered measurements that he performed on 60 individual 38ASP connectors. According to Rahn, the average diameter between the trailing end of the tensioning tangs was greater than the diameter across the connector’s anchoring tabs. Therefore, Rahn concluded that the 38ASP’s tensioning tangs “have a larger diameter at the trailing end than the main body of the adaptor, and are therefore bent away from the main body.” (Doc. 471 at 16.) Arlington went on to argue that because each of the Whipper-Snap products shared an identical design, Rahn’s findings were not limited to the 38ASP, but instead held for each of the fifteen accused products. Bridgeport defeated summary judgment in part by asserting that the “connector bodies and adaptors for these various models [the accused products] are manufactured using different dies, and there is no evidence that the dimensions of all the models are identical.” (See id. at 19-20.)

On September 14, 2009, this matter proceeded to a jury trial on a total of thirty Whipper-Snap connector models.³ Arlington alleged that the accused products literally infringed the ‘050 patent, and also infringed under the doctrine of equivalents. In addition, Arlington levied a breach of contract claim, contending that the Whipper-Snap connector models were colorable imitations of the enjoined Snap-In and Speed-Snap products. After ten days of trial, the jury returned a verdict of literal infringement on twenty-nine of thirty products, and determined that one connector model infringed under the doctrine of equivalents. The jury also determined that Bridgeport’s infringement was willful, and found it liable for breach of contract on twenty-six of the connectors models. The court entered non-final judgment on October 7, 2009 and post-trial briefing thereafter followed.

II. Standard of Review

Bridgeport moves for renewed judgment as a matter of law and seeks a new trial. A motion for renewed judgment as a matter of law may be granted in a party’s favor if “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” FED. R. CIV. P. 50(a), (b). The court should grant such a motion “only if, viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there

³ Subsequent to the court’s summary judgment order, Bridgeport disclosed seventeen additional Whipper-Snap connectors, the existence of which Arlington was purportedly unaware. The court then excised the duplex connectors from trial, see infra Part III.A.1, leaving a total of thirty products remaining for the jury’s consideration.

is insufficient evidence from which a jury reasonably could find liability.”

Lightninig Lube, Inc. v. Witco Corp., 4 F.3d 1153, 1166 (3d Cir. 1993). In assessing the sufficiency of the evidence, the court may not weigh the evidence, determine the credibility of witnesses, or substitute its version of facts for the jury’s version. Id.

Under Rule 59, the district court may order a new trial “for any reason for which a new trial has heretofore been granted in an action at law in federal court. FED. R. CIV. P. 59(a). The court’s power to grant a new trial is not unlimited, and may only be exercised “to prevent injustice or to correct a verdict that was against the weight of the evidence.” Am. Bearing Co. v. Litton Indus., Inc., 792 F.2d 943, 948 (3d Cir. 1984); see also Olefins Trading, Inc. v. Han Yang Chem. Corp., 9 F.3d 282, 289 (3d Cir. 1993) (stating that district court may only grant new trial on weight of evidence “where a miscarriage of justice would result if the verdict were to stand”). When the exclusion of evidence is at issue, a new trial should be granted where “substantial errors” in the rejection of evidence occurred. Goodman v. Pa. Turnpike Comm’n, 293 F.3d 655, 676 (3d Cir. 2002). When a jury instruction is at issue, a new trial should be granted when the error is fundamental or may cause a miscarriage of justice. See Wagner by Wagner v. Fair Acres Geriatric Ctr., 49 F.3d 1002, 1018 n.17 (3d Cir. 1995). A litigant must meet a “high threshold” to obtain a new trial, Grazier v. City of Phila., 328 F.3d 120, 128 (3d Cir. 2003), and absent “a showing of substantial injustice or prejudicial error, a new trial is not warranted

and it is the court's duty to respect a plausible jury verdict," Montgomery City v. MicroVote Corp., 152 F. Supp. 2d 784, 795 (E.D. Pa. 2001).

III. Discussion

Bridgeport has filed its renewed motion for judgment as a matter of law concurrently with its motion for a new trial. The motions overlap significantly. Both identify several of the same alleged errors of law, and question the sufficiency of the evidence pertaining to similar aspects of the jury's verdict. The court is cognizant that different standards of review apply to the two motions; for example, a new trial may be granted even when judgment as a matter of law on a similar question is inappropriate. See Wagner, 49 F.3d at 1017. For the sake of efficiency, however, the court will simultaneously address issues raised in both of Bridgeport's motions. The court will then address those concerns which are unique to the renewed motion for judgment as a matter of law and the motion for a new trial, respectively.

A. Overlapping Issues

1. Res Judicata

Fourteen days prior to commencement of trial in the above-captioned matter, the court in Arlington II entered a final judgment of non-infringement in favor of Bridgeport. (See Arlington II, Dkt. Nos. 349-51.) Specifically, Arlington II held that the duplex connector models—3838ASP and 3838SP—did not infringe the '050 patent as a matter of law. Upon receipt of this order, Bridgeport immediately filed a motion to stay trial in the above-captioned matter, and to fully brief the

applicability of issue and claim preclusion. Two days after Bridgeport filed its motion to stay, the court conducted a pretrial conference with the parties during which Bridgeport's res judicata claims were extensively discussed.⁴ At the conclusion of the pretrial conference, the court orally denied Bridgeport's motion for stay, excised the duplex connectors from the instant trial, and permitted the parties to submit additional letter briefing on claim and issue preclusion. On September 10, 2009, the court issued an order setting forth in more detail its rationale for denying Bridgeport's motion for a last-minute stay. (See Doc. 584.)

As the court has attempted to explain on previous occasions, much of the difficulty regarding issue and claim preclusion derives from the inconsistent claim constructions furnished in the matter *sub judice* and Arlington II. (See id. at 5-6.) Under Federal Circuit law, a Markman order is typically interlocutory in nature; thus, a court's claim construction does not necessarily engender collateral estoppel effects until a case proceeds to final judgment. See RF Del., Inc. v. Pac. Keystone Techs., Inc., 326 F.3d 1255, 1261-62 (Fed. Cir. 2003). The undersigned therefore was not bound by the earlier Arlington II claim construction as a matter of law, (see Doc. 584 at 6), nor were the parties incorrect to advocate their own positions. That neither party was *required* to advocate for adherence to the Arlington II claim construction, however, does not render the failure to do so the most prudent of

⁴ The transcript of the pretrial conference appears on the docket at Dkt. No. 571, with discussion and argument on issue and claim preclusion at pages 23 through 62.

litigation strategies. There is Federal Circuit authority that endorses a “law of the case” approach to preclude redetermination of a claim’s construction in a second infringement suit on an identical claim. See Del Mar Avionics, Inc. v. Quinton Instrument Co., 836 F.2d 1320, 1324 (Fed. Cir. 1987); (see also Doc. 584 at 6). Furthermore, the Federal Circuit has intimated that when a court conducts a thorough Markman hearing, complete with the presentation of witnesses and evidence, parties may reasonably request that the resulting claim construction be afforded collateral estoppel effects in a second suit on the same patent claim. See RF Del., Inc., 326 F.3d at 1262. The pertinent point at this juncture is not to gaze back with the crystal clarity of hindsight, but simply to note that neither party urged the undersigned to construe claim 8 in a manner consistent with the Arlington II construction or forewarned the court of the potential for future, res judicata complications.⁵

⁵ At the pretrial conference, counsel for Bridgeport stated that “everybody has known that . . . this day was coming,” (Doc. 571 at 56), presumably meaning that the parties understood that issues of res judicata were looming from the moment parallel litigation was initiated on the same patent claim. Counsel apparently raised the res judicata argument explicitly before Judge Caputo. (See Doc. 571 at 40 (explaining that Bridgeport requested entry of final judgment before Judge Caputo “so that we could assert collateral estoppel, issue preclusion, and claim preclusion” in the above-captioned matter)). However, these arguments were not once broached with this court until submission of pretrial memoranda on August 12, 2009. (See Doc. 528.) As the undersigned explained at the pretrial conference, “All along I assumed that we were dealing with different products so that when we got to the point where my claim construction . . . and Judge Caputo’s claim construction . . . would end up in the Federal Circuit and the Federal Circuit would decide the issue of claim construction that you have received differing opinions on.” (Doc. 571 at 30.)

Bridgeport complains that in denying its motion for stay, the court erroneously precluded it from briefing res judicata issues and “ruled *sua sponte* that Bridgeport was estopped from raising issue and claim preclusion with respect to its remaining Whipper-Snap connectors under the doctrine of unclean hands.” (Doc. 689 at 2-3.) Bridgeport mistakes the court’s ruling on the request for stay with one directed to the merits of the res judicata arguments. (See Doc. 584 at 9-10 (denying last-minute stay and citing Landis v. N. Am. Co., 299 U.S. 248, 254-55 (1936), for the proposition that a district court maintains the inherent power to control its docket)). As the court explained in its September 10, 2009 order, the decision to deny Bridgeport’s stay request was driven by several factors, including the timing of the motion, the pretrial expense incurred by both parties and the court, and the then-uncertain applicability of res judicata to the instant matter. (See Doc. 584.) The court attempted to balance these factors with an eye toward advancing the case—and the legal questions involved therein—to the Federal Circuit, where the differing Markman orders will receive *de novo* review. (See Doc. 571 at 30-31.) In the end, the court concluded that a stay of several months was both inefficient and inequitable. However, the parties have now fully briefed matters of res judicata, and the court has considered those arguments on their merits.

a. Issue Preclusion

“A fundamental precept of common-law adjudication, embodied in the related doctrines of collateral estoppel and res judicata, is that a right, question or fact distinctly put in issue and directly determined by a court of competent

jurisdiction . . . cannot be disputed in a subsequent suit between the same parties or their privies” Montana v. United States, 440 U.S. 147, 153 (1979). Collateral estoppel, also referred to as issue preclusion, specifically bars relitigation of an issue that was conclusively determined in a prior adjudication and that was essential to the original judgment. Witkowski v. Welch, 173 F.3d 192, 198 (3d Cir. 1999); Venuto v. Witco Corp., 117 F.3d 754, 758 (3d Cir. 1997). By foreclosing subsequent disputes over issues on which a court has ruled, collateral estoppel promotes fairness and certainty, while preventing the wasteful expenditure of resources upon issues already resolved through adversarial proceedings. See Allen v. McCurry, 449 U.S. 90, 94 (1980); Montana, 440 U.S. at 153-54; Witkowski, 173 F.3d at 198-99.

Bridgeport contends that the construction of claim 8 reached by Judge Caputo has collateral estoppel effects in the matter *sub judice*, and this court is therefore obligated to apply Arlington II’s interpretation of “spring metal adaptor.” (Doc. 689 at 5.) According to Bridgeport, the parties fully litigated the construction of claim 8 in Arlington II, leading to the entry of final judgment on September 1, 2009, and the same issue was presented for adjudication in the matter *sub judice*. In Arlington II, “spring metal adaptor” was construed to require a split in the circular metal adaptor ring. (See Arlington II, Dkt. No. 98 at 17.) Bridgeport argues that not one of the thirty accused Whipper-Snap devices adjudicated infringing in the above-captioned matter possesses a split in its adapter ring. Thus, Bridgeport asserts that the accused products cannot read on claim 8’s “spring metal adaptor” limitation when the Arlington II claim construction is applied.

A finding of issue preclusion⁶ is appropriate when (1) “the issue sought to be precluded is the same as that involved in the prior action; (2) th[e] issue was actually litigated; (3) it was determined by a final and valid judgment; and (4) the determination was essential to the prior judgment.” Peloro v. United States, 488 F.3d 163, 175 (3d Cir. 2007) (quoting Burlington N. R.R. v. Hyundai Merch. Marine Co., 63 F.3d 1227, 1231-32 (3d Cir. 1995)). In addition, *defensive* collateral estoppel requires that “the party to be precluded must have had a ‘full and fair’ opportunity to litigate the issue in the first action.” Id. at 175. The party seeking to invoke collateral estoppel bears the burden to prove each of its elements. Dici v. Pennsylvania, 91 F.3d 542, 548 (3d Cir. 1996). Arlington does not dispute that the claim construction issue was actually litigated or that it was determined by a final and valid judgment in Arlington II. Therefore, the court need not analyze these factors.

The court finds that issue preclusion applies to the construction of claim 8. When a court provides a Markman interpretation of a claim’s language, and that interpretation was essential to a final resolution of a dispute over infringement, a party to the suit is precluded from seeking a different interpretation of the same language in a subsequent dispute. See Molinaro v. Fannon/Courier Corp., 745 F.2d 651, 655 (Fed. Cir. 1984); Dynacore Holdings Corp. v. U.S. Philips Corp., 243 F.

⁶ The terms “issue preclusion” and “collateral estoppel” are used interchangeably in modern res judicata law. See Venuto v. Witco Corp., 117 F.3d 754, 758 n.5 (3d Cir. 1997).

Supp. 2d 31, 35 (S.D.N.Y. 2003), aff'd, 363 F.3d 1263 (Fed. Cir. 2004). In other words, the scope of the claims cannot be altered in the second lawsuit. Molinaro, 745 F.2d at 655. Arlington argues that the issues presented in Arlington II were dissimilar because the claim constructions derived by the two courts “are diametrically opposed.” (Doc. 740 at 5-6.) This contention misses the point. The issue presented to both courts, for purposes of collateral estoppel, was the scope and meaning of claim 8 of the ‘050 patent. The parties in both matters requested construction of the “spring metal adaptor” limitation, they presented identical evidence and argument with respect to this limitation, and received an interpretation of “spring metal adaptor” in Arlington II that was essential to the judgment of non-infringement. (See Doc. 689 at 6 (providing comparison citations to parties’ reliance on identical arguments in both Markman hearings)). When the Arlington II judgment became final, the construction of claim 8 arrived at therein acquired issue preclusive effect in subsequent suits on the same patent claim.

Arlington also had a full and fair opportunity to litigate its claim in Arlington II. According to the Supreme Court, “[r]edetermination of issues is warranted if there is reason to doubt the quality, extensiveness, or fairness of procedures followed in prior litigation.” Montana, 440 U.S. at 164 n.11. Other courts have inquired whether (1) there were significant procedural limitations in the prior proceeding, (2) the party had an incentive to fully litigate the issue, and (3) effective litigation was hindered by the nature or relationship of the parties. See Banner v. United States, 238 F.3d 1348, 1354 (Fed. Cir. 2001). Arlington does not dispute that

it was permitted ample opportunity to litigate the construction of claim 8 before Judge Caputo, but instead argues that “Judge Caputo failed to understand the prosecution history of the ‘050 Patent and its parent, the ‘164 Patent.” (Doc. 740 at 7.) This is an argument for appeal, not one directed at the fairness of the procedures provided in Arlington II. After all, were Arlington correct, it is difficult to imagine an instance in which issue preclusion would apply to a subsequent suit involving an identical patent claim.

Although the court finds that the claim construction in Arlington II would otherwise be entitled to issue preclusive effect, the court declines to apply the doctrine in light of the unique circumstances presented in this case. Application of collateral estoppel is premised on fairness. See Smith v. Pittsburgh Gage & Supply Co., 464 F.2d 870, 874 (3d Cir. 1972) (“While the doctrine of res judicata is meant to foster judicial efficiency and protect defendants from the oppression of repeated litigation, it should not be applied inflexibly to deny justice.”); see also In re Freeman, 30 F.3d 1459, 1467 (Fed. Cir. 1994) (“The doctrine of issue preclusion is premised on principles of fairness.”); Title v. Immigration & Naturalization Serv., 322 F.2d 21, 24 (9th Cir. 1963) (holding that collateral estoppel “should not be exercised in such a manner as to work an injustice”). Typically, the doctrine prevents relitigation of issues already decided. In this matter, however, the construction of claim 8 has been already been litigated before the undersigned and a jury trial completed; in short, relitigation has already occurred. As a result of the parties’ failure to seek consolidation of the instant matter and Arlington II and

Bridgeport's delay in pursuing this affirmative defense, see Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found., 402 U.S. 313, 350 (1971) (stating that collateral estoppel is "an affirmative defense[] that must be pleaded"), inconsistent constructions have been rendered and await *de novo* review by the Federal Circuit. It is now for the Federal Circuit to resolve the inconsistent Markman constructions. Given the unique procedural posture in which counsel presented this issue—i.e., on the eve of a complex trial with witnesses, advocates, and the court assembled at significant expense, and the merits of the res judicata issue in doubt—and that a judgment has already been entered herein, the court finds that application of issue preclusion is inappropriate. See Freeman, 30 F.3d at 1467 (explaining that "a court is not without some discretion to decide whether a particular case is appropriate for application of [issue preclusion]"); see also 18 CHARLES A. WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE § 4426, at 688 & n.12 (2d ed. 2002) (noting that some courts have denied preclusion "in order to implement individually particularized concerns of justice" and citing cases). Judicial economy and basic fairness require that the jury's verdict be upheld.

b. Claim Preclusion

Under the doctrine of claim preclusion, "a judgment on the merits in a prior suit bars a second suit involving the same parties or their privies based upon the same cause of action." Parklane Hosiery Co. v. Shore, 439 U.S. 322, 326 n.5 (1979). For a party to succeed on a defense of claim preclusion, it must be shown that there has been (1) a final judgment on the merits in a prior suit, (2) that involves the same

parties or their privies, and (3) there is a subsequent suit based on the same cause of action. Elkadrawy v. Vanguard Group, Inc., 584 F.3d 169, 172-73 (3d Cir. 2009). The question herein is whether the matter *sub judice* constitutes the same cause of action as that litigated to conclusion in Arlington II. Federal Circuit law dictates that “an infringement claim in a second suit is the ‘same claim’ as in an earlier infringement suit if the accused products in the two suits are ‘essentially the same.’”⁷ Roche Palo Alto LLC v. Apotex, Inc., 531 F.3d 1372, 1379 (Fed. Cir. 2008). Bridgeport contends that the duplex connectors adjudged non-infringing in Arlington II are “essentially the same” as the accused Whipper-Snap devices adjudicated herein. (See Doc. 689 at 12-15.) As the party asserting claim preclusion, Bridgeport bears the burden of establishing that the accused Whipper-Snap connectors are essentially the same as the duplex connectors. Foster v. Hallco Mfg. Co., Inc., 947 F.2d 469, 478 (Fed. Cir. 1991).

“Accused devices are ‘essentially the same’ where the differences between them are merely ‘colorable’ or ‘unrelated to the limitations in the claim of the patent.’” Acumed LLC v. Stryker Corp., 525 F.3d 1319, 1324 (Fed. Cir. 2008).

Bridgeport argues that none of the accused Whipper-Snap connectors possess a

⁷ The extent to which two infringement claims constitute the ‘same claim’ is an issue particular to patent law, which necessitates application of Federal Circuit precedent. See Roche Palo Alto LLC v. Apotex, Inc., 531 F.3d 1372, 1379 (Fed. Cir. 2008).

“spring metal adaptor,” as that term was construed by the court in Arlington II.⁸ (See Doc. 689 at 13-15.) However, the court has ruled that the Arlington II claim construction is not applicable in this matter. Thus, the appropriate inquiry is whether the difference between the duplex connectors and the Whipper-Snap connectors at issue herein are merely colorable or unrelated to the claims of the patent. See Nystrom v. Trex Co., Inc., 580 F.3d 1281, 1285 (Fed. Cir. 2009) (stating that in order for claim preclusion to apply, there must not be “material differences” between the accused devices).

The court finds that Bridgeport has made an insufficient evidentiary showing with respect to the material differences between each Whipper-Snap connector model and the duplex connectors. It is not enough to state that none of the Whipper-Snap devices possess a “spring metal adaptor” as construed in Arlington II. Bridgeport makes no attempt to show that each of the thirty accused Whipper-Snap devices is essentially the same as the duplex connector models. Consequently, Bridgeport fails to meet its burden of proof and its claim preclusion argument must fail. See Foster, 947 F.2d at 478.

In sum, neither the doctrine of issue or claim preclusion warrant summary judgment of non-infringement, nor does the court’s failure to apply either precept

⁸ Bridgeport contends that Nystrom v. Trex Co., Inc., 580 F.3d 1281 (Fed. Cir. 2009), compels application of claim preclusion. In Nystrom, however, the claim construction issued in the first lawsuit was equally applicable to the second lawsuit. See id. at 1285. In light of the court’s decision not to apply issue preclusion to Judge Caputo’s claim construction, however, such a scenario is not present in the matter *sub judice*.

necessitate a new trial. Bridgeport’s renewed motion for judgment as a matter of law and its motion for a new trial on these grounds will accordingly be denied.

2. Willful Infringement

Section 284 of the Patent Act allows the court to “increase the damages up to three times the amount found or assessed.” 35 U.S.C. § 284. Such an award is punitive in nature and “depends on a showing of willful infringement or other indicium of bad faith warranting punitive damages.” Sensonics, Inc. v. Aerosonic Corp., 81 F.3d 1566, 1574 (Fed. Cir. 1996). In order to demonstrate that infringement was willful, a patentee must make a two-pronged showing. First, “a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent.” In re Seagate Tech. LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc). If this threshold inquiry is satisfied, a patentee must then establish that “this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer.” Id.

Under the first prong of the Seagate inquiry, the accused infringer’s state of mind is irrelevant and it is inappropriate to consider evidence of copying. See Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314, 1336 (Fed. Cir. 2009) (citing Seagate, 497 F.3d at 1371). Furthermore, legitimate defenses to infringement—even if unsuccessful—may be sufficient to rebuff a finding of objective recklessness. See id. at 1336-37; OPTi, Inc. v. Apple, Inc., No. 2:07-CV-21-

CE, 2009 WL 4727912, at *2 (E.D. Tex. Dec. 3, 2009) (explaining that “strong, but unsuccessful noninfringement and invalidity defenses presented during litigation weigh against a finding of objective recklessness”). A legitimate defense can include reasonable positions on claim construction, even if those positions are ultimately rejected. See Cohesive Techs., Inc. v. Waters Corp., 543 F.3d 1351, 1374 (Fed. Cir. 2008).

Bridgeport contends that it presented “a reasonable, credible and legitimate defense to infringement based in part on its claim construction arguments.” (Doc. 689 at 31.) In particular, Bridgeport argues that it presented identical claim construction arguments to Judge Caputo and the undersigned, which resulted in inconsistent claim constructions. According to Bridgeport, the fact that two judges examined claim 8 and interpreted the “spring metal adaptor” limitation differently legitimizes the reasonableness of its proposed claim construction. Because it presented what it characterizes as a reasonable interpretation of claim 8, Bridgeport implores the court to overturn the jury’s conclusion that its infringement was objectively unreasonable.

In spite of the jury’s verdict, the court cannot ignore the contrary claim construction issued by Judge Caputo. The Markman hearings were hotly contested. The parties presented identical evidence and arguments to two different federal judges in the same district; the parties thereafter received conflicting interpretations of the “spring metal adaptor” limitation. Although the undersigned disagrees with the claim construction provided by Judge Caputo, I cannot

characterize his conclusions as unreasonable. Consequently, the court finds that Bridgeport maintained a reasonable non-infringement defense, one that entitles it to a finding of non-willfulness. Indeed, it would be difficult to conjure up a defense which would be more “reasonable” than one expressly adopted by a federal judge, albeit in conflict with a second federal judge. See Cohesive Techs., Inc., 543 F.3d at 1374 (invalidating willfulness finding when the proper claim construction was the subject of a reasonable dispute); Centocor Ortho Biotech, Inc. v. Abbott Labs., No. 2:07-CV-139-TJW, slip op. at 6-8 (E.D. Tex. Oct. 1, 2009) (finding no objective recklessness when claim construction issues were “hotly contested, close, and required an intensely factual inquiry”). Accordingly, there was not legally sufficient evidence to find that Bridgeport acted with an “objectively high likelihood” that it would infringe a valid patent, and Bridgeport is entitled to a verdict of non-willfulness as a matter of law.⁹

The court is also required to conditionally rule upon Bridgeport’s motion for a new trial on non-willfulness pursuant to Federal Rule of Civil Procedure 50. See FED. R. CIV. P. 50(c)(1) (explaining that “[i]f the court grants a renewed motion for judgment as a matter of law, it must also conditionally rule on any motion for a new

⁹ The court prohibited Bridgeport from presenting its claim construction defense to the jury, for to do so would have engendered significant confusion. (See Doc. 586 (finding probative value of Arlington II claim construction to be substantially outweighed by the danger of unfair prejudice under Rule 403 and citing cases)). The first Seagate prong examines objective reasonableness, and a reasonable defense to claim construction need not be presented to the jury in order to factor into this inquiry.

trial by determining whether a new trial should be granted if the judgment is later vacated or reversed”). Even if the court had denied Bridgeport’s renewed motion for judgment as a matter of law of non-willfulness, it would nonetheless grant a new trial for the reasons stated above. Bridgeport presented a reasonable position on the construction of the “spring metal adaptor” limitation. See Cohesive Techs., 543 F.3d at 1374 (stating that a “legitimate defense” may include a reasonable position on claim construction). The Arlington II court adopted Bridgeport’s position. To subject Bridgeport to the treble damage provision of § 284 when it proffered a legitimate defense to claim construction would result in a miscarriage of justice. Consequently, the court will conditionally grant Bridgeport’s motion for a new trial on non-willfulness pursuant to Federal Rule of Civil Procedure 50(c)(1).

3. Colorable Imitation

An accused product is a colorable imitation of an enjoined product if it is the substantial equivalent of the enjoined product. An accused device is the substantial equivalent of an enjoined device if it performs substantially the same function in substantially the same way with substantially the same result. See Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608 (1950); KSM Fastening Sys., Inc. v. H.A. Jones Co., Inc., 776 F.2d 1522, 1527-28 (Fed. Cir. 1985). Changes to the accused product that do not pertain to elements of the patent claim at issue, however, are irrelevant to the product-to-product comparison. See Additive Controls & Measurement Sys. v. Flowdata, Inc., 154 F.3d 1345, 1350 (Fed. Cir. 1998) (affirming district court’s holding that variations in an accused product were

colorable when the modifications did not pertain to “elements of the pertinent patent claim”); KSM, 776 F.2d at 1528-29 (stating that it may “only be necessary to determine that the modified device has not been changed from the adjudged device in a way which affects an element of a claim”); Contempo Tobacco Prods., Inc. v. McKinnie, No. 95-1265, 1997 WL 862528, at *1973 (C.D. Ill. Apr. 8, 1997) (disregarding changes in accused product that are unrelated to the patent claims). Consequently, an accused product is a colorable imitation of an enjoined product when both products literally infringe the same patent claim, for there can be no substantial differences between the products that are relevant to the claims of the patent at issue.

Bridgeport admitted that its Snap-In and Speed-Snap connectors infringed the ‘050 patent in 2004 and it was enjoined from making, using, or selling these devices or any colorable imitation thereof. (See Doc. 270.) Bridgeport further stipulated that the accused Whipper-Snap products meet each limitation of claim 8 except the “outwardly sprung members” limitation. Hence, a finding that a Whipper-Snap connector model possessed outwardly sprung members meant that the model in question literally infringed claim 8, *and* was a colorable imitation as a matter of law. If a Whipper-Snap connector model was found not to literally infringe claim 8, however, then only a product-to-product equivalency analysis would properly reveal whether the connector in question was a colorable imitation of one of the enjoined products. See KSM, 776 F.2d at 1527-28.

With these principles of law in mind, the court instructed the jury on colorable imitation as follows:

To prove [colorable imitation,] Arlington must demonstrate that each model Whipper Snap device is a colorable imitation of one of the enjoined Snap-In or Speed-Snap fittings. In order to determine whether an accused product is a colorable imitation of one of Bridgeport's enjoined Snap-In products you must find one of the following is true. First, if an accused Whipper Snap product literally infringes claim 8 of the '050 patent, then it is a colorable imitation under the law.

You may apply the test for literal infringement that I explained to you earlier and determine whether the accused Whipper Snap model contains each limitation found in claim 8. Remember, however, that the parties have stipulated that each model Whipper Snap connector contains each claim 8 limitation except outwardly sprung members. Thus, if you find that an accused Whipper Snap model contains outwardly sprung members, it is a colorable imitation of the previously enjoined Bridgeport products. If you do not find that an accused Whipper Snap connector literally infringes claim 8 of the '050 patent, then you must determine whether the accused Whipper Snap connector is the substantial equivalent of one of the enjoined Snap-In or Speed-Snap fittings.

(Doc. 663 at 151-52.) Bridgeport contends that provision of this instruction constitutes an error of law entitling it to both judgment as a matter of law and a new trial. Its central complaint relates to the initial portion of the charge—informing the jury that a Whipper-Snap product which literally infringes claim 8 is a colorable imitation as a matter of law. In light of the colorable imitation law discussed above, Bridgeport's arguments are unpersuasive. As the court has explained, if two products—in this case the enjoined and accused products—literally meet each limitation of the same patent claim, any differences between the products are merely colorable, and any alterations unrelated to the

claim at issue are irrelevant.¹⁰ See Additive Controls, 154 F.3d at 1350. Accordingly, the court’s jury instruction was an accurate statement of colorable imitation law and Bridgeport is not entitled to judgment as a matter of law or a new trial on this basis.

In addition, the court did not err when it instructed the jury that

not every possible alteration to the Whipper Snap product is relevant. The only requirements that are important in this analysis are those that relate to claim 8 of the ‘050 patent. . . . Moreover, because Bridgeport admits that the Whipper Snap products contain all of the limitations of claim 8 except outwardly sprung members, you may restrict your focus to this limitation when you compare Whipper Snap products with corresponding Snap-In and Speed-Snap products.

(Doc. 663 at 152-53.) Bridgeport argues that it should have been permitted to present “*all* the multiple differences between the previously enjoined and [accused] products,” even if those differences were unrelated to the elements of claim 8. (See Doc. 690 at 37.) Differences unrelated to the limitations of the patent claim,

¹⁰ The court acknowledged, and the parties agreed, that the law on colorable imitation in the context of an infringement suit is unclear. (See Doc. 662 at 341-45.) Most authorities which discuss the issue do so in the context of contempt proceedings, when literal infringement of the accused products is not directly at issue. In the instant matter, the verdict form juxtaposed the issues of literal infringement and colorable imitation. The jury was able to conclude whether a particular Whipper-Snap connector model met each limitation contained in claim 8 before approaching the breach of contract inquiry. Thus, unlike most colorable imitation cases, the jury was able to decide whether two devices literally infringed the same patent claim. As counsel for Bridgeport concedes, this factual scenario is unique. (Id. at 342.) The court recognizes the dearth of cases on point and, in general, the paucity of applicable law on the subject of colorable imitation. Nonetheless, the court finds that its colorable imitation instruction does not represent a fundamental error of law or miscarriage of justice, and thus is not grounds for a new trial or judgment as a matter of law.

however, are not relevant. See Additive Controls, 154 F.3d at 1350; KSM, 776 F.2d at 1528-29; Contempo Tobacco, 1997 WL 862528, at *1973. Bridgeport stipulated that its Whipper-Snap products contained each limitation of claim 8 except outwardly sprung members. Bridgeport further admitted that the enjoined products met all of the claim 8 limitations. The outwardly sprung members limitation was the lone remaining difference—relevant to the limitations of claim 8—between the enjoined and accused products. Accordingly, the court’s instruction to this effect was not in error.¹¹

Bridgeport also argues the jury should have been instructed that its ownership of five United States patents was relevant to the colorable imitation inquiry. Specifically, Bridgeport owns United States Patent Numbers 6,916,988 (the “988 patent”); 7,057,107 (the “107 patent”); 7,064,272 (the “272 patent”); 7,075,007 (the “007 patent”); and 7,151,223 (the “223 patent”). (See Doc. 691, Exs. 6-10.) Bridgeport requested an instruction reading, “The fact Bridgeport has its own patents on the ‘Whipper Snap’ products is relevant to your determination of

¹¹ Even if this instruction were erroneous, Bridgeport’s argument would fail to show prejudicial effect. See Bhaya v. Westinghouse Elec. Corp., 709 F. Supp. 600, 601 (E.D. Pa. 1989) (explaining that if an erroneous jury instruction is provided, the court must determine “whether that error was so prejudicial that refusal to grant a new trial would be ‘inconsistent with substantial justice’” (quoting FED. R. CIV. P. 61)). The first step in the colorable imitation analysis asks whether each Whipper-Snap model literally infringes claim 8. If so, the model in question is a colorable imitation as a matter of law and the product-to-product equivalency analysis was unnecessary. The jury concluded that each of the twenty-six connectors found to be in breach of contract were also literal infringements. (See Doc. 632.) Thus, recourse to the second step of the analysis was unnecessary given the jury’s factual findings.

whether any ‘Whipper Snap’ product is substantially different from its alleged corresponding ‘Snap-In’ product. The fact that patents were issued to Bridgeport suggests the Patent Office considered the new design substantially different than the earlier, older design.” (Doc. 587 at 43.) As an initial matter, Bridgeport was unable to present any competent evidence that the Whipper-Snap connectors practiced the ‘107, ‘272, ‘007, or ‘233 patents. (See Doc. 660 at 251-58.) Thus, with respect to these four patents, Bridgeport laid no foundation to support its proffered instruction.

Bridgeport presented some evidence, albeit slight, that its ‘988 patent covered the Whipper-Snap connectors.¹² Separate patentability, however, does not avoid equivalency as a matter of law. Fiskars, Inc. v. Hunt Mfg. Co., 221 F.3d 1318, 1324 (Fed. Cir. 2000). More importantly, the jury was provided with no evidence that Bridgeport patented any difference between the enjoined devices and its Whipper-Snap models relevant to the limitations of claim 8. See Additive Controls, 154 F.3d at 1350 (holding that variations in an accused product were colorable when the modifications did not pertain to “elements of the pertinent patent claim”). If Bridgeport wished to secure the jury instruction that it proffered, it should have presented additional testimony that the ‘988 patent encompassed a non-colorable

¹² The evidence of record was entered through videotaped depositions of Bridgeport executives Kenneth Kiely (“Kiely”) and Delbert Auray (“Auray”), neither of whom were qualified as patent experts or claimed to have any experience reading patent claims. Nonetheless, both offered limited, conclusory testimony that the Whipper-Snap connectors practiced the ‘988 patent. (See PX434, Kiely Dep. 114; Doc. 758, Ex. 6 at 98.)

difference between the enjoined and accused products; it did not do so, and the court properly rejected its colorable imitation instruction.¹³

Bridgeport's final colorable imitation argument attacks the weight and legal sufficiency of the evidence presented at trial. The jury found that twenty-six Whipper-Snap products were colorable imitations of the enjoined Snap-In or Speed-Snap products, (see Doc. 632), and the evidence presented at trial was more than sufficient to support such a finding. Arlington executive Thomas Gretz ("Gretz") and its infringement expert, Rahn, examined the Whipper-Snap devices and their enjoined counterparts to demonstrate the absence of any fundamental differences pertinent to the limitations of claim 8. (See, e.g., Doc. 655 at 164-66, 173-82; Doc. 660 at 12-22.) Arlington presented side-by-side comparisons of the products and Rahn opined that each of the twenty-six Whipper-Snap devices was a colorable imitation of a Snap-In or Speed-Snap model. Although Bridgeport's expert, Dr. Brian Williamson ("Williamson"), disagreed with these opinions, the jury was entitled to weigh his credibility as it saw fit. The court will not second-

¹³ Assuming *arguendo* that the court should have instructed the jury with respect to the '988 patent, its failure to do so did not result in prejudice. Evidence of the '988 patent would only be relevant if the jury reached step two in the colorable imitation inquiry, and was forced to discern whether an accused product was the substantial equivalent of an enjoined product. As discussed above, however, each of the twenty-six connectors the jury adjudged to be in breach of contract also literally infringed claim 8 of the '050 patent. See supra note 11. Because each of the twenty-six connectors literally infringed, they amounted to colorable imitations as a matter of law, and recourse to the substantial equivalency inquiry was unnecessary.

guess the jury's determination at this juncture,¹⁴ see Lightning Lube, 4 F.3d at 1166, and Bridgeport's motion for judgment as a matter of law and a new trial on breach of contract is denied.

4. Literal Infringement

A patent claim is literally infringed when each limitation of the properly construed claim is found in the accused device. Jansen v. Rexall Sundown, Inc., 342 F.3d 1329, 1332 (Fed. Cir. 2003); Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 812 (Fed. Cir. 2002). Literal infringement is a question for the trier of fact. Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1302 (Fed. Cir. 2005); Bai v. L. & L. Wings, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

Bridgeport argues that it is entitled to judgment as a matter of law and a new trial because (1) the court should have awarded it summary judgment of non-infringement at the Rule 56 stage of the litigation, (2) Rahn's sampling method was flawed, and (3) evidence of the excised duplex connectors was erroneously admitted into evidence. The court will address each argument in turn.

¹⁴ In addition, the jury may have based its colorable imitation determination on its conclusion that the accused Whipper-Snap products literally infringed claim 8 of the '050 patent. As the court discusses infra, there is legally sufficient evidence to support such a finding. Under the court's colorable imitation instruction, a finding of literal infringement was sufficient to satisfy the colorable imitation inquiry. See supra notes 11, 13.

a. **Bridgeport's Motion for Summary Judgment of Non-Infringement on Thirteen Whipper-Snap Connector Models**

Bridgeport argues that it was entitled to summary judgment of non-infringement on thirteen of its Whipper-Snap connectors because Arlington did not come forth with sufficient evidence to sustain a judgment in its favor at the Rule 56 stage. (See Doc. 689 at 36.) The memorandum and order of court (Doc. 471) dated February 4, 2008 discussed the parties' summary judgment submissions in extensive detail and determined that there was a genuine dispute of fact regarding the existence of outwardly sprung members on the Whipper-Snap products. Contrary to Bridgeport's instant assertions, Arlington met its burden to come forth with affirmative evidence in support of its right to relief. Arlington presented photographic evidence purporting to show the tensioning tangs bent outward from the normal plane of the adaptor; deposition testimony indicating that the Whipper-Snap models contain an "S" ramp which pushes the tensioning tangs outward at an angle; measurements from Rahn and Arlington expert Daniel O'Neil ("O'Neil") suggesting that the tensioning tangs were outwardly bent; and expert opinion from Rahn indicating that the tensioning tangs were "outwardly sprung members." (See id.) The sum total of this evidence was sufficient to raise a genuine issue of material fact, especially when compared to the slim evidentiary submissions of non-infringement proffered by Bridgeport, (see id. at 22).

b. Rahn's Sampling Method

During trial, Rahn testified that the entire universe of Whipper-Snap connectors manufactured by Bridgeport literally infringed the '050 patent. Rahn derived this conclusion by measuring several hundred individual devices and offering an opinion based on the measurements that he conducted. In pertinent part, Rahn testified as follows:

- Q: You have done over a thousand measurements, am I right?
A: That's correct.
Q: And do you know how to do statistics, sir?
A: Yes, I do. I have taught a course and I've been involved in certainty analysis for experimental measurements. So I know how to do uncertainty analysis. I know how to do statistics, but in this case I don't feel it's warranted. If you look at the data it's clear, there's no question in the data that these are infringing products. If you look down the list there's only one of out of 328 products that didn't infringe. That's what I call overwhelming evidence.
Q: Is it more likely than not as you sit here today in your opinion that all seventeen million of those connectors that Bridgeport has deployed into the marketplace are infringing based upon your studies?
A: Absolutely.
Q: And do you have a degree of certainty with respect to this?
A: I do. I'm a scientist, I'm an engineer. I do measurements all the time, so I have a degree of scientific certainty for sure.

(Doc. 660 at 197-98.) Bridgeport claims that Rahn's opinion regarding "all seventeen million" Whipper-Snap connectors was erroneously admitted because he lacked the statistical expertise to so opine. (Doc. 689 at 37.) Without this testimony, Bridgeport contends that there is not legally sufficient evidence to support the verdict of literal infringement, and it is therefore entitled to judgment as a matter of

law. Furthermore, Bridgeport asserts that admission of Rahn's testimony constitutes a substantial error which warrants a new trial.

In the memorandum and order of court (Doc. 582) dated September 10, 2009, the court rejected Bridgeport's motion to limit Rahn's testimony for failure to perform a proper statistical analysis. Bridgeport's renewed motion for judgment as a matter of law raises no additional arguments of merit.¹⁵ Bridgeport presents no evidence to suggest that admission of Rahn's opinions first required him to perform a scientifically rigorous statistical examination. As the court previously held, Rahn's testimony was supported by "good grounds," see In re TMI Litig., 193 F.3d 613, 665 (3d Cir. 1999); (Doc. 582 at 11), and his opinion was admissible under the Third Circuit's liberal policy of admissibility, see Pineda v. Ford Motor Co., 520 F.3d 237, 243 (3d Cir. 2008). The critique Bridgeport now urges upon the court—a critique more thorough than any raised prior to trial or during presentation of the evidence—is one that it had full opportunity to explore on cross examination.

¹⁵ Bridgeport cites to one decision from the Eastern District of Texas for the proposition that a patentee "cannot simply assume that all of the accused products are like the one [its] expert tested and thereby shift to the accused infringer the burden to show that is not the case." Medtronic Vascular, Inc. v. Boston Scientific Corp., Civ. A. No. 2:06-CV-78, 2008 WL 2744909, at *3 (E.D. Tex. July 11, 2008). In Medtronic Vascular, however, the patentee's expert measured only a limited selection of accused devices and attempted to apply the measurements derived therefrom to accused devices that constituted entirely different products. Thus, there were several types of accused products for which no appropriate measures were performed. This is plainly distinct from the instant suit, where Rahn extracted measurements from each of the accused Whipper-Snap connector models. In this fashion, Rahn presented measurements which tended to show literal infringement for each accused product in question.

In short, Rahn performed actual measurements on each of the accused Whipper-Snap connector models. He disclosed the results of his findings to the jury. Therefore, the jury had before it empirical data pertaining to each model accused of infringement. As patent infringement is a strict liability offense, see Seagate, 497 F.3d at 1368, the jury possessed hard evidence to suggest that each model contained outwardly sprung members. If Bridgeport thought this evidence unrepresentative of the entire universe of Whipper-Snap connectors, it had full opportunity to attack Rahn's testimony and present counter-testimony from its own witnesses. Rahn's testimony was properly admitted, and the jury was entitled to rely upon it to reach a conclusion with respect to literal infringement; Bridgeport's motion for judgment as a matter of law and for a new trial on this ground will accordingly be denied.

c. Evidence of the Duplex Connectors

Bridgeport argues that the court committed a substantial error of law when it permitted video deposition testimony in which Bridgeport executives Delbert Auray ("Auray") and Kenneth Kiely ("Kiely") discussed aspects of the duplex connectors. The court excised these connector models from the trial and excluded testimony concerning them. See supra Part III.A.1; (Doc. 584). However, when Auray and Kiely were deposed, both discussed the general design of the Whipper-Snap connector by referencing the shape and features of the duplex models. (See Doc. 691, Exs. 2-3.) Neither witness specifically referenced the duplex connector by model number, however, and their testimony was limited to general features of the

connectors, such as the “S” ramp and the design of the tensioning tangs.

Bridgeport does not deny that each of the connectors shares these general design features, (see Doc. 756 at 9-11), and thus the general design testimony was relevant to the connector models at issue in the above-captioned suit. Bridgeport was therefore not prejudiced by admission of this testimony, and its presentation to the jury warrants neither judgment as a matter of law or a new trial.

5. Doctrine of Equivalents

The doctrine of equivalents holds that an accused product or process that does not literally infringe a patent claim may nonetheless infringe the claim if the product or process is the substantial equivalent of the patented invention. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabuskiki Co., 535 U.S. 722, 732 (2002); Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1423 (Fed. Cir. 1997). The doctrine is implicated when “two devices do the same work in substantially the same way, and accomplish substantially the same result.” Graver Tank, 339 U.S. at 608; AquaTex Indus. v. Techniche Solutions, 479 F.3d 1320, 1326 (Fed. Cir. 2007) (applying the doctrine when “the difference between the claimed invention and the accused product or method [is] insubstantial or . . . the accused product or method performs the substantially same function in substantially the same way with substantially the same result as each claim limitation of the patented product or method”). In order to prove that one product is the equivalent of another, the patentee must “present particularized evidence that links the accused products to

the patent on a limitation by limitation basis.” Motionless Keyboard Co. v. Microsoft Corp., 486 F.3d 1376, 1383 (Fed. Cir. 2007).

In the matter *sub judice*, the jury concluded that one Whipper-Snap connector model, the 802ASP, infringed the ‘050 patent under the doctrine of equivalents. (See Doc. 632.) Bridgeport claims that it is entitled to judgment as a matter of law and a new trial because (1) Arlington’s theory of equivalency did not satisfy the All Limitations Rule, (2) prosecution history estoppel barred Arlington from relying on the doctrine of equivalents with respect to the “outwardly sprung member” limitation, and (3) the verdict was not supported by the evidence presented.

a. All Limitations Rule

Application of the doctrine of equivalents is constrained by the “All Limitations Rule.” The All Limitations Rule “informs a doctrine of equivalents analysis by requiring that equivalence be assessed on a limitation-by-limitation basis, rather than from the perspective of the invention as a whole, and that no limitation be read completely out of the claim.” Depuy Spine, 469 F.3d at 1017. Thus, “if a theory of equivalence would entirely vitiate a particular claim element, partial or complete judgment [of non-infringement] should be rendered by the court.” Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 39 n.8 (1997).

Bridgeport argues that the All Limitations Rule was not met in this case because Arlington’s theory of equivalence effectively vitiated the “outwardly sprung member” limitation of claim 8. (See Doc. 689 at 45.) As Bridgeport characterizes it,

Rahn testified that the tensioning tangs on the Whipper-Snap connectors need not be bent outward from the normal adaptor plane in order to meet the “outwardly sprung members” limitation. (*Id.*) However, Rahn’s testimony was more precise than Bridgeport acknowledges, and nowhere did he contend that the tensioning tangs need not be bent outward. In fact, he emphasized that the tensioning tangs must be outwardly sprung when he explained that the tangs “have to be outward, and they have to be positioned on the adaptor so that they’re outward and they engage the side walls of the hole. That’s the function. That’s the way those outwardly sprung members function.” (Doc. 660 at 159.) Rahn’s testimony continued:

So if you decided that yes, in fact the tensioning tangs on the Whipper Snap products are outward, they do engage the side walls of the hole, they’re resilient, they maintain tension, then they infringe by doctrine of equivalen[ts].

Q: My question to you, sir, is it your position that you could ignore the normal plane for doctrine of equivalen[ts] analysis?

A: Well, *I think it’s encapsulated in the word outward. They have to be outward. They have to be positioned to engage the side walls of the hole, and that means that they have to have that outward configuration.*

Q: They have to be outward from the normal plane, I mean you have to consider the normal plane for doctrine of equivalen[ts] then, don’t you, sir?

A: No, I think that doctrine of equivalen[ts] you don’t need to be literal with the claim language. You just need to be substantially the same function, substantially the same way, substantially the same result, and to do that for these products simply means that they have to be outward, they have to engage the side walls of the hole.

Q: Well, don’t you agree that you can’t read a limitation out of existence by application of the doctrine of equivalen[ts]?

A: Yes, I agree with that.

Q: And aren’t you by your doctrine of equivalen[ts] when you say that you can ignore the normal plane, isn’t that another way of you

reading out of existence the limitation as construed by the court for at least two outwardly sprung members?

A: You're the one who's saying ignore the normal plane. I never said that.

Q: Well, no, you're the one, I thought you said that you didn't have to take into account the normal plane. Maybe I misunderstood. I thought you said you did not have to take into account the normal plane for doctrine of equivalen[ts] analysis.

A: Well, you don't have to be literally stuck with the words that are, as they're construed. You can use equivalent the idea of function, way, result.

Q: Well, then what is equivalent to the normal plane as you describe it of the anchor tabs?

A: Well, okay, the equivalent of bent outward at an angle relative to the normal plane is that the tensioning tangs are to be outward and they have to engage the side walls of the hole in the junction box.

(Id. at 159-62 (emphasis added)).

As is clear from Rahn's testimony, Arlington's theory of equivalence required that at least two tensioning tangs be the equivalent of outwardly sprung members, even if their angle was not strictly measured relative to the plane provided by the anchoring tabs. After extensive cross examination, Rahn reemphasized, "You still have to have outwardly sprung members." (Id. at 162.) Moreover, Rahn explained that the tensioning tangs on the accused products are "positioned towards the outside of the connector, and in doing so they can maintain the tension between the side walls of the hole and the junction box and the connector." (Id. at 117.)

Accordingly, Arlington's theory of equivalency did not vitiate the "outwardly sprung member" limitation—it explicitly required that the Whipper-Snap tensioning tangs operate as substantial equivalents under this limitation.

Bridgeport is thus not entitled to judgment as a matter of law or a new trial on this issue.

b. Prosecution History Estoppel

Bridgeport next claims that prosecution history estoppel bars Arlington from relying on the doctrine of equivalents with respect to the “outwardly sprung member” limitation. When a patent applicant narrows his or her patent claim during the course of patent prosecution, that which was voluntarily relinquished ordinarily may not be recaptured via the doctrine of equivalents. See Warner-Jenkinson, 520 U.S. at 30; AquaTex, 479 F.3d at 1325. Prosecution history estoppel may arise during patent prosecution in one of two ways: “either (1) by making a narrowing amendment to the claim (‘amendment-based estoppel’) or (2) by surrendering the claim scope through argument to the patent examiner (‘argument-based estoppel’).” Conoco, Inc. v. Energy & Envtl. Int’l, L.C., 460 F.3d 1349, 1363 (Fed. Cir. 2006). The simultaneous “rewriting of dependent claims into independent form coupled with the cancellation of the original independent claims creates a presumption of prosecution history estoppel.” Honeywell Int’l v. Hamilton Sundstrand Corp., 370 F.3d 1131, 1134 (Fed. Cir. 2004).

Bridgeport’s instant prosecution history estoppel argument is identical to that which it raised during Rule 56 briefing. The court has already rejected this argument, (see Doc. 471 at 25-26), and nothing in its renewed motion for judgment as a matter of law or motion for a new trial compels a contrary holding.

Bridgeport’s claims are without merit for the reasons stated in the court’s summary

judgment order, (see id.), and there was no reason for the court to provide a jury instruction on prosecution history estoppel.

c. Weight and Sufficiency of the Evidence

Bridgeport's final doctrine of equivalents argument concerns the weight and sufficiency of the evidence presented. Specifically, Bridgeport argues that the evidence was insufficient for the jury to conclude that the 802ASP connector is the substantial equivalent of a device practicing the '050 patent. The parties stipulated that the Whipper-Snap connectors literally meet each limitation of claim 8 except the requirement that they possess outwardly sprung members. Thus, Arlington's evidence properly focused upon the extent to which the 802ASP contained outwardly sprung members.

Rahn testified that he applied the function, way, and result test of Graver Tank to the "outwardly sprung members" limitation of claim 8. He explained his findings as follows:

[The outwardly sprung members'] function is to electrically and mechanically connect the connector to the junction box, and the result they get is basically to make sure the connector is tightly attached and electrically grounded to the junction box. A lot of times the function result sounds very similar, but one is the function, the other is the result you get if you're successful in doing that function.

The way that this is done is that these members are flexible and they're positioned on the adaptor in such a way that they can engage the side walls of the hole and maintain tension against the side walls. So that positioning has to do with the fact that they're outward on the adaptor, on the outside, so they can touch the side walls, and that they are near the trailing end, because as I said before the side walls of the hole right here are towards the trailing end, and this is the trailing end of the adaptor down here.

(Doc. 660 at 63-64.) Rahn then applied the function, way, and result test to the tensioning tangs of the 802ASP model, stating

And so the function as I stated earlier to electrically and mechanically connect the connector and the junction box, and surely the outwardly sprung members do that job. You saw the pictures where they're engaging the side walls of the hole, they're designed, you know, that is their function, and the way they do it, again in order for this test, it doesn't have to be exactly the same way, it just has to be substantially the same way, it is substantially the same.

They're resilient, they're flexible, they flex in when you stick the connector in the box, and they're positioned on the adaptor in the correct way. They have a part that's near the trailing end, and they are outward. So if you look[,] they're positioned towards the outside of the adaptor, and in doing so they can maintain the tension between the side walls of the hole and the junction box and the connector. . . .

And then the last part is the result, and the result is that you have a tightly connected fitting, conducts ground, and these products do that.

(Id. at 116-17.)

Finally, Rahn provided particularized evidence to link the outwardly sprung members described by claim 8 to the accused products' tensioning tangs:

Q: So let me sum up, do both the outwardly sprung members of claim 8 and Bridgeport's Whipper Snap connectors have the same function?

A: Yes, they do.

Q: And that function is that they both electrically and mechanically connect the connector to the junction box?

A: Yes.

Q: Do both the outwardly sprung members of claim 8 and Bridgeport's Whipper Snap connectors perform this function in the same way?

A: Yes, they do.

Q: And that way is stated here in this slide, they are positioned towards the outside, they both are near the trailing end of the adaptor, they both maintain tension against the side walls of the hole?

A: And they're, in addition they have some flexibility, some resilience.

Q: And they're resilient, and then do both the outwardly sprung members of claim 8 and Bridgeport's Whipper Snap product achieve substantially the same result?

A: They certainly do.

(Id. at 118-19.) Rahn also buttressed his testimony by utilizing slides and actual products which demonstrated the equivalency analysis on actual connector devices.

Bridgeport claims that its infringement expert, Williamson, contradicted Rahn's testimony by explaining that the 802ASP utilizes curved tangs with a three-point spring as opposed to the straight tangs and simple spring featured in the Arlington products. (See Doc. 661 at 292, 298-301.) According to Williamson, this difference causes the tensioning tangs to exert greater force when they engage the walls of a junction box. (See id. at 300-01.) Thus, in Bridgeport's telling, although the connector tangs perform the same function as those described by the '050 patent, they do so in a substantially different way to achieve a substantially different result. (Doc. 689 at 49.)

Rahn's testimony on this point was in conflict with that offered by Williamson. According to Rahn, "[c]laim 8 doesn't talk about the shape of the tang at all. It could be a flat tang, it could be a curved tang. Those are all within the scope of claim 8." (Doc. 660 at 55.) In addition, Rahn flatly contradicted Williamson's opinion regarding the difference in the way that the tangs function. In particular, Rahn indicated that Bridgeport's design simply provides the tangs an additional point of contact, but does not cause the tangs to function in a substantially different way to achieve a substantially different result. (See Doc. 662 at 274-77.) Rahn explained that the tangs on the accused products "are substantially the same when it comes to tangs and being flexible outwardly sprung

members as is required by claim 8.” (Id. at 277.) Thus, there was more than sufficient evidence to support Rahn’s opinions, and the jury was free to credit his testimony and to afford it greater weight than that which it attributed to Williamson’s. Accordingly, the court will deny Bridgeport’s motion for judgment as a matter of law and for a new trial based upon the weight and sufficiency of the evidence.

Bridgeport also contends that the 802ASP practices the ‘988 patent, and argues that the separate patentability of the 802ASP demonstrates that it is substantially different from products which practice the ‘050 patent. When an accused device is the subject of a separate patent, “a finding of equivalency, while perhaps not necessarily legally foreclosed, is at least considerably more difficult to make out.” Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 493 F.3d 1368, 1379 (Fed. Cir. 2007). The problem with Bridgeport’s argument is that it presented virtually no evidence during the trial that its 802ASP practiced the ‘988 patent,¹⁶ or that the ‘988 patent was granted because of an improvement or novel

¹⁶ As discussed supra, Bridgeport executives Kiely and Auray testified that the Whipper-Snap products practiced the ‘988 patent, but their testimony was conclusory in nature, neither was qualified as an expert to so opine, and they said nothing about the 802ASP specifically. See supra note 12.

alteration in the design of the tensioning tangs.¹⁷ The jury was, of course, free to weigh the evidence of separate patentability against the extensive evidence of equivalency proffered by Arlington, and to draw its conclusions as a matter of fact. The court finds that there was ample evidence to support the jury's verdict of equivalency, and the motion for judgment as a matter of law and for a new trial on this ground is denied.

6. Weight and Sufficiency of the Lost Profits Evidence on Patent Infringement

In order to recover damages in the form of lost profits, a patentee must establish that “but for” the infringement, it would have captured the infringer's sales. Ericsson, Inc. v. Harris Corp., 352 F.3d 1369, 1377 (Fed. Cir. 2003); Fuji Photo Film Co. v. Jazz Photo Corp., 249 F. Supp. 2d 434, 454 (D.N.J. 2003) (“In order to recover lost profits, a patent owner must demonstrate ‘a causal connection between the infringement and its loss of profits.’” (quoting Bic Leisure Prods., Inc. v. Windsurfing Int'l, Inc., 1 F.3d 1214, 1218 (Fed. Cir. 1993))). Such a showing requires “the patentee to reconstruct the market to determine what profits the patentee

¹⁷ Near the close of trial, counsel for Bridgeport acknowledged that it had not presented evidence that any Whipper-Snap products, including the 802ASP, practiced the '988 patent. At a side bar conference, the following exchange transpired:

The Court:	Let's make it clear that you have not presented any testimony or cannot present any testimony through this witness that Bridgeport practices a 988 patent.
Mr. Anderson:	Okay, that's fine.

(Doc. 661 at 237.)

would have made had the market developed absent the infringing product.”

Ericsson, 352 F.3d at 1377. A patentee’s market reconstruction must be founded upon “sound economic proof of the nature of the market and likely outcomes with infringement factored out of the economic picture.” Grain Processing Corp. v. Am. Maize-Prods. Co., 185 F.3d 1341, 1350 (Fed. Cir. 1999).

Patent owners may resort to any market reconstruction theory that establishes but for causation using reliable economic evidence. See Ericsson, 352 F.3d at 1377. Arlington proffered evidence under both a two-supplier market theory and the familiar Panduit test. The two-supplier theory holds that “[w]hen the patent owner and infringers were the only suppliers of the patented product, it is reasonable to infer that the patent owner would have made the sales made by the infringers.” Del Mar Avionics, 836 F.2d at 1327. To succeed under the two-supplier theory, a patentee must show “(1) the relevant market contains only two suppliers, (2) its own manufacturing and marketing capability to make the sales that were diverted to the infringer, and (3) the amount of profit it would have made from these diverted sales.” Micro Chem., Inc. v. Lextron, Inc., 318 F.3d 1119, 1124 (Fed. Cir. 2003). The Panduit test requires that a patentee prove: (1) a demand for the product during the period in question; (2) an absence of acceptable non-infringing substitutes; (3) its own manufacturing or marketing capability to exploit the demand; and (4) a computation of the profits it would have accrued. Panduit Corp. v. Stahlin Bros. Fibre Works, 575 F.2d 1152, 1156 (6th Cir. 1978); see also Cohesive

Techs., 543 F.3d at 1373 (citing Standard Havens Prods., Inc. v. Gencor Indus., Inc., 953 F.2d 1360, 1373 (Fed. Cir. 1991)).

Bridgeport contends that neither theory was satisfactorily proven, for Arlington failed to show that the quick-connect fittings market contained only two suppliers, or that the market contained a lack of non-infringing substitutes for purchase. (Doc. 689 at 53.) However, both Gretz and Arlington's damages expert, Mark Gallagher ("Gallagher"), provided testimony to support a two-supplier market theory. (See Doc. 655 at 216, 219-21; Doc. 658 at 53-58.) Gallagher explained the manner in which Bridgeport mimicked Arlington pricing strategies, and coached its salespeople to compare Bridgeport and Arlington products, both strategies which Gallagher explained were indicative of a two-supplier market. (See Doc. 658 at 53-58.) Gretz testified to the similarity in both parties' customer base, and stated that

no other companies sell quick-connect fittings similar to those manufactured by Arlington and Bridgeport.¹⁸ (See Doc. 655 at 216, 219-21.)

Bridgeport's attack on the sufficiency of the evidence to support lost profits under Panduit is similarly deficient. The Federal Circuit has explained the acceptable non-infringing substitute inquiry by noting, "A product on the market which lacks the advantages of the patented product can hardly be termed a substitute acceptable to the customer who wants those advantages." Standard Havens, 953 F.2d at 1373. Gretz and Gallagher both testified to the lack of

¹⁸ Bridgeport argues that Gretz testified "that there are multiple substitutes for Arlington's Snap-In Fittings and multiple suppliers of those substitute snap-in connectors in the market." (Doc. 689 at 53.) However, this is an overstatement of Gretz's testimony. In fact, in the passage cited by Bridgeport to support its assertion, Gretz testifies as follows:

- Q: And there are companies that sell connectors that compete with Arlington, right?
- A: Bridgeport does, sure.
- Q: Sure, and there's other companies, right?
- A: What kind of product are you talking about?
- Q: Snap-In connectors.
- A: No, but you said for what other kind of connectors.
- Q: Are there other companies, there are companies that sell Snap-In connectors that compete with Arlington?
- A: The only one that I know of is Bridgeport in this line.
- Q: Okay. Do you know whether your competitors sell Snap-In connectors that can be used in at least some of the same application that your Snap-In connectors can be used?
- A: There are some connectors that have been out for thirty years, but I don't think that's the competition for this product.

(Doc. 655 at 233-36.) The jury was free to credit Gretz's assertion that only Arlington and Bridgeport were serious competitors in the quick-connect fitting market.

acceptable non-infringing substitutes in the quick-connect fitting market. Gretz explained the difference, in terms of utility, between the quick-connect device and products utilizing a locknut. (See Doc. 655 at 234-36.) According to Gretz, the devices using a locknut simply lack an advantage sought by snap-in customers—namely, speed.

Bridgeport cites to Gretz’s trial testimony for the proposition that other companies, including Madison Electric, Rayco Manufacturing, and Neer Manufacturing, sold snap-in connectors with the same advantages as Arlington’s products. (See Doc. 689 at 54.) However, Gretz clearly stated that these products were not acceptable non-infringing substitutes. (See Doc. 656 at 71-72.) Furthermore, although Bridgeport introduced marketing materials from other companies touting the advantages of various electrical connectors, the jury was entitled to view these materials skeptically. The mere fact that a company’s brochure states that it is a quick-connect fitting does not render it an acceptable non-infringing alternative under Panduit. The jury was entitled to rely upon Gretz’s assertion that these products were not acceptable non-infringing substitutes, a contention confirmed, in part, by both Gallagher and Bridgeport

executive Paul Suzio (“Suzio”).¹⁹ (See Doc. 658 at 58-62; Doc. 661 at 84-85, 89-98.)

Accordingly, Bridgeport is not entitled to judgment as a matter of law or a new trial on lost profits.

B. Judgment as a Matter of Law

Bridgeport moves for renewed judgment as a matter of law, but not for a new trial, on several distinct issues relating to literal infringement and damages. With respect to literal infringement, Bridgeport contends that there was not legally sufficient evidence to support the jury verdict on twelve connector models whose specific measurements had not been entered into the record, or to support the jury’s finding that 100% of the 802ASP connector models were infringing. In addition, Bridgeport challenges the legal sufficiency of the evidence proffered to support lost profits for Bridgeport’s custom-made Whipper-Snap connector models, as well as the damages awarded for breach of contract. The court will address these issues *seriatim*.

1. Diameter Measurements of Twelve Connector Models

During his live testimony, Rahn stated that he measured the diameter across pairs of tensioning tangs and along the adaptor plane for each of the Whipper-Snap

¹⁹ Bridgeport also contends that Arlington failed to make a showing of actual lost sales. (See Doc. 689 at 55.) However, such a showing was unnecessary. Under the court’s lost profits jury instruction—the propriety of which is discussed *infra*—the second factor of Panduit was satisfied if (1) there were no acceptable non-infringing alternatives, or (2) Arlington lost actual sales as a result of the infringing activity. (See Doc. 663 at 141.) Here, there was legally sufficient evidence to establish the absence of acceptable non-infringing substitutes, rendering it unnecessary to proceed to the second step.

connector models accused of infringement. (See Doc. 660 at 87-100.) Rahn then used these measurements to calculate the angle at which the tensioning tangs were bent away from the normal plane of the adaptor. (See id.) The raw diameter measurements were recorded in an exhibit, while Rahn summarized angular calculations in a separate document. By virtue of inadvertence, Arlington neglected to enter into the record the exhibit containing specific diameter measurements for twelve Whipper-Snap connector models.²⁰

Bridgeport argues that absent these specific measurements, the jury was without legally sufficient evidence to conclude that the twelve connectors in question possessed outwardly sprung members. However, Arlington admitted exhibits summarizing Rahn's measurements and Rahn explained that he actually performed the measurements on each connector—and described the results thereof—during his live testimony. (See Doc. 663 at 175-81.) Consequently, there was legally sufficient evidence for the jury to conclude that the twelve connector models in question literally infringed the '050 patent and Bridgeport's motion for judgment as a matter of law is denied.

²⁰ For a more detailed discussion of the events leading to Arlington's inadvertent omission of the exhibit in question, see Dkt. No. 663 at 179-80. Essentially, the exhibit contained extraneous material requiring redaction, which Arlington agreed to remove before admitting the document into evidence. The modified document was never admitted after the parties moved forward in trial.

2. Infringement by the 802SP Connector

When discussing the measurements that he performed upon Bridgeport's 802SP connector model, Rahn testified that one of the ten individual connectors that he examined did not possess outwardly bent tensioning tangs. (See Doc. 660 at 97.) Bridgeport asserts that the court must therefore grant judgment of non-infringement as a matter of law with respect to 10% of the 802SP connector models. This contention is easily rejected. First, patent infringement is a strict liability offense. See Seagate, 497 F.3d at 1368. Rahn measured nine connectors models with outwardly bent tensioning tangs, and these measurements comported with the measurements he derived on 100% of the remaining connector models. (See Doc. 660 at 96-97.) Furthermore, although one of the ten 802SP models did not possess outwardly sprung members, Rahn testified that this was the result of a defective device rather than a difference in design. (See id. at 97.) The jury was free to credit Rahn's testimony and weigh this evidence as it saw fit. Accordingly, Bridgeport's motion for judgment as a matter of law is without merit.

3. Products Manufactured at Customer Request

Bridgeport next contends that even if Arlington is entitled to lost profits damages for the majority of the Whipper-Snap connector models, it is not entitled to lost profits for those models which Bridgeport custom-designed for a consumer's unique needs. In particular, Suzio testified that Whipper-Snap connector models SG38SPL and 845SPL were manufactured by Bridgeport at a customer's request to comport with that customer's particular requirements. (See Doc. 660 at 259.)

Bridgeport argues that both connectors were therefore not manufactured to mimic one of the numerous Arlington designs and that Arlington has not demonstrated that it has the marketing or manufacturing capability to capture these unique sales. Arlington placed evidence in the record to rebut this charge, however, when Gretz testified as follows:

Q: [D]o you ever sell products that are designed to an original equipment manufacturer's specifications? . . .

A: It's not a practice, but we do have some.

Q: Sure, and if an OEM [original equipment manufacturer] comes to you and says here's the specs that I want, you know, that's what you build for them and sell it to them, right?

A: Sure.

Q: Sure, and because that's the particular product they want with those specs.

A: Sure.

(Doc. 655 at 232.) The jury was entitled to credit this testimony and to conclude therefrom that Arlington was capable of custom-designing a connector to satisfy a client's unique manufacturing needs. Accordingly, the jury was entitled to find that Arlington possessed the expertise to manufacture and market a custom-designed connector, especially in light of Gretz's testimony that Arlington had done so in the past.²¹

²¹ Bridgeport also argues that there was insufficient evidence to impose 100% lost profits damages for Whipper-Snap model 802SP because 10% of the connectors Rahn measured did not possess outwardly bent tensioning tangs. (See Doc. 689 at 57-58.) The court has discussed this argument above, see *supra* Part III.B.2, and rejects Bridgeport's argument for similar reasons. Rahn testified that all 802SP models infringed. The jury was entitled to credit this testimony, and they clearly did so. Thus, Bridgeport is not entitled to a carve-out of 10% of lost profits damages.

4. Sufficiency of the Evidence on Breach of Contract Damages

Under Pennsylvania law,²² the general rule for determining lost profits in a suit for breach of contract “permits recovery of lost profits when there is evidence to establish them with reasonable certainty, there is evidence to show that they were the proximate consequence of the wrong and if they were reasonably foreseeable.” Quinn v. Bupp, 955 A.2d 1014, 1021 (Pa. Super. Ct. 2008) (internal quotations omitted). Lost profits amount to the difference between that which the plaintiff actually earned and that which the plaintiff would have earned absent the defendant’s breach. Smith v. Penbridge Assocs., 655 A.2d 1015, 1021 (Pa. Super. Ct. 1995). Mere uncertainty regarding the damage amount does not bar recovery when it is clear that damages resulted from the defendant’s conduct. Id.

Bridgeport claims that the trial evidence was insufficient to support lost profits for breach of contract because Arlington did not establish with reasonable certainty that consumers would have purchased its products over other substitute products in the electrical connector market. (See Doc. 689 at 59.) Bridgeport argues that for purposes of breach of contract, replacement products need not possess all the advantages of the patented product. (See Doc. 689 at 59.) Thus,

²² Contract law is an issue of substantive state law which in this case requires the court to apply Pennsylvania law to the parties’ substantive claims. See Norfolk S. Ry. Co. v. Basell USA, Inc., 512 F.3d 86, 91-92 (3d Cir. 2008). Neither party disputes the application of Pennsylvania state law to this matter. Accordingly, decisions of the Pennsylvania Supreme Court are binding precedent upon this court, while Pennsylvania Superior Court decisions will be treated as persuasive precedent. See State Farm Fire & Cas. Co. v. Estate of Mehlman, --- F.3d ---, 2009 WL 4827027, at *1 n.2 (3d Cir. Dec. 16, 2009).

other connector types may conceivably constitute “substitute products.” As set forth more fully above, however, Arlington presented sufficient evidence that the snap-in connector market contained no acceptable non-infringing substitute products. See supra Part III.A.6; (see also Doc. 656 at 71-72). Gallagher then provided the jury with a breach of contract damages analysis based, in part, upon the lack of acceptable alternative products. (See Doc. 658 at 98-101.) According to Arlington’s evidence, Bridgeport offered the only true alternative snap-in connector on the market. It is not unreasonable to infer that when the market contains but two alternatives, elimination of one of those products will cause customers to purchase the only remaining alternative product. See Smith, 655 A.2d at 1021 (explaining that mere uncertainty regarding the damage amount does not bar recovery when the damages clearly resulted from a defendant’s breach). Based upon the testimony of Gretz and Gallagher, the jury could reasonably conclude that customers seeking snap-in products would not substitute other connectors which lacked the advantages of the snap-in devices. Consequently, the jury was entitled to

conclude that Arlington would have captured Bridgeport's sales but for the breach of contract.²³

C. Motion for a New Trial

Bridgeport moves for a new trial, but not judgment as a matter of law, on four issues that it contends amounted to significant errors of law.²⁴ Specifically, Bridgeport argues that the court erred by prohibiting Bridgeport from presenting evidence of Judge Caputo's claim construction to the trier of fact; that the court's construction of claim 8 was legally erroneous; that the court committed judicial misconduct when it responded to a jury question; and that the court's instruction

²³ Bridgeport further claims that Arlington is not entitled to breach of contract damages on its SG38SPL and 845SPL Whipper-Snap models because the connectors were designed specifically to meet the unique preferences of Bridgeport customers. (See Doc. 689 at 61.) According to Bridgeport, "[t]here is no evidence that Arlington knew of those customers or that those customers knew of Arlington or that if they did, Arlington could have met their price and design requirements." (Id.) As discussed above, Gretz testified that Arlington occasionally manufactured custom-designed connectors for its consumer base. (See Doc. 655 at 232.) Logically, if Arlington were the only manufacturer of snap-in connector devices, those customers requiring uniquely-designed snap-in connectors would have sought out the market's sole manufacturer. Thus, it is reasonable to conclude that Arlington would have captured these consumers but for Bridgeport's breach of contract. Accordingly, Bridgeport's argument regarding the SG38SPL and 845SPL models is unavailing.

²⁴ In its motion for a new trial, Bridgeport raises numerous issues for which it provided no supporting argument in its brief in support. The court can only conclude that these objections were withdrawn, see L.R. 7.5 (explaining that "if supporting legal briefs are not filed within the time provided in this rule such motion shall be deemed to be withdrawn"), and the court does not address the unsupported objections herein.

on lost profit damages under Panduit was incorrect as a matter of law and resulted in substantial prejudice. The court will address these issues *seriatim*.

1. Judge Caputo's Claim Construction

Bridgeport first contends that the court committed error by prohibiting it from presenting evidence of Judge Caputo's conflicting construction of claim 8 and by refusing its request for a special jury instruction speaking to the same issue. Because the res judicata arguments had not been substantively considered prior to trial, Bridgeport was essentially seeking to present evidence to the trier of fact of a conflicting claim construction. A party has no right to present to the jury an inconsistent claim construction, Fenner Inv., Ltd. v. Microsoft Corp., 632 F.3d 627, 638 (E.D. Tex. 2009) (prohibiting party from presenting conflicting claim construction to jury when its "argument is contrary to the [court's] claim construction order"); Transamerica Life Ins. Co. v. Lincoln Nat'l Life Ins. Co., 597 F. Supp. 2d 897, 910 (N.D. Iowa 2009) (holding that "no party should be allowed to argue to the jury claim constructions that are contrary to the court's claim construction or to reassert to the jury constructions that the court has already expressly or implicitly rejected"), and the undersigned's Markman order was, and is, the law of the case, see Del Mar Avionics, 836 F.2d at 1324 (holding that once final, the court's claim construction is the law of the case). The conflicting claim constructions must now be reconciled on appeal. Bridgeport's motion for a new trial on this ground is therefore denied.

2. Claim Construction

Bridgeport next seeks to relitigate the Markman hearing, contending that the court committed significant errors of law in construing the terms “circular,” “spring metal adaptor,” “outwardly sprung members,” and “carried by said metal adaptor near said trailing end of said adaptor.” (See Doc. 690 at 5-15.) Each of the arguments Bridgeport raises in its motion for a new trial was raised and thoroughly examined during the claim construction phase of this lawsuit. (Compare Doc. 283 (Bridgeport’s Markman brief), with Doc. 690 (Bridgeport’s motion for new trial)). The court carefully considered Bridgeport’s claim construction arguments at that time, conducted a hearing on the matter, and set forth its understanding of the contested terms. (See Doc. 376.) Bridgeport does not identify a clear error of law or fact, nor has it presented newly discovered evidence. See Harsco Corp. v. Zlotnicki, 779 F.2d 906, 909 (3d Cir. 1995) (requiring that challenges to an interlocutory order correct manifest errors of law or fact, or present newly discovered evidence). Thus, this is merely an attempt to relitigate the court’s claim construction—an invitation the court declines. For the reasons set forth in the court’s February 25, 2008 Markman order, the alleged claim construction errors identified in Bridgeport’s motion for a new trial are without merit.

3. The Court’s Response to the Jury Question

As explained above, see supra Part III.B.1, Arlington neglected to admit an exhibit containing Rahn’s diameter measurements for twelve Whipper-Snap connector models. Rahn testified that he performed the measurements for these

models and used the measurements to calculate the angle at which the tensioning tangs were bent away from the normal plane of the adaptor. Arlington admitted a separate exhibit representing a summary of Rahn’s findings, but the specific diameter measurements did not appear thereon.

After three hours of deliberation, the jury sent a question to the court that read, “We are looking for specific measurements for [twelve Whipper-Snap] products.” (Doc. 663 at 172-73.) The court conferred with the parties and determined that the Arlington exhibit containing the sought-after measurements was not provided to the jury. However, a summary of Rahn’s angular measurements—the derivation of which required Rahn to first measure the diameter across a particular model’s tensioning tangs—was admitted into evidence as PX420. Arlington proposed to reopen the record and admit the inadvertently-omitted exhibit containing the actual diameter measurements. Bridgeport requested that the court simply inform the jury that the exhibit was not part of the record. The court refused to reopen the record, but then noted that “we can respond to the jury’s inquiry, . . . and indicate to them that those testing results are not part of the record, but the summary of those results are reflected in plaintiff’s exhibit, and then identify what that exhibit is.” (Id. at 175.)

Counsel for Bridgeport disagreed with the court’s proposal, and ultimately the following exchange occurred:

THE COURT: All right. Under the unique circumstances of this omission of these exhibits, which I’m not going to attribute to anything other than inadvertence, I think

the court's proposed language is appropriate and that is the language I intend to use. I recognize that it goes beyond a specific response to the jury's inquiry, but I think it's appropriate under all of the circumstances, and that will be the court's ruling on this matter. Let me ask you this, Mr. Anderson [counsel for Bridgeport], just so I'm not making an error in my representation. You would agree that Dr. Rahn referenced his measurements in calculating the angles that are reflected on Exhibit 420.

MR. ANDERSON: I believe he made general reference to that[,] he made some measurements that resulted in his summary on 420, but he didn't go through each and every one.

THE COURT: Well, he didn't go through each and every one, but he did more than generally reference. He in fact explained how he came up with those angles on the record.

MR. ANDERSON: I believe he did do that.

(Doc. 663 at 180-81.) The court then provided the jury with a response reading, "The specific measurements that you have requested are not part of the record. However, the record reflects that Dr. Rahn completed these measurements before calculating the summary information set forth in Plaintiff's Exhibit 420." (*Id.* at 177.) Bridgeport contends that the court's response "unfairly influenced the jury to ignore the absence of underlying diameter measurements for the twelve subject Whipper-Snap connectors." (Doc. 690 at 51.)

A new trial is warranted when improper conduct by the court unfairly influenced the verdict. Marcavage v. Bd. of Trs. of Temple Univ., 400 F. Supp. 2d 801, 804 (E.D. Pa. 2005). "The moving party must meet a heavy burden to prevail on the ground of judicial misconduct." 11 WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE § 2809, at 103-05. The court's comments "may not confuse or mislead

the jury, or become so one-sided as to assume an advocate's position.” Am. Home Assurance Co. v. Sunshine Supermarket, Inc., 753 F.2d 321, 327 (3d Cir. 1985). In the present matter, the court's response to the jury's inquiry was neither confusing or misleading. Rather, the comment was an attempt to point the triers of fact to exhibits which encapsulated the information they were seeking. Moreover, the parties agreed that the diameter measurements for the twelve connector models were in the record via Rahn's testimony. Thus, rather than reopen the record—a step that the court could have taken in its discretion, see United States v. Hugh, 236 F. App'x 796, 799 (3d Cir. 2007)—the court simply directed the jury to the summarized information contained in PX420. This action did not unfairly influence the jury and is therefore not grounds for a new trial.

4. Jury Instruction on Lost Profits

Bridgeport's final argument in support of its motion for a new trial attacks the instruction provided to the jury regarding lost profits damages for patent infringement. Specifically, Bridgeport complains about the following explanation regarding the manner in which a patentee may prove lost profits:

To recover lost profits due to lost sales[,] Arlington must show by a preponderance of the evidence that it would have made additional profits if Bridgeport had not infringed. One way Arlington may establish lost profits is by proving each of the following factors by a preponderance of the evidence. One, there was a demand for the patented product; two, there were no acceptable noninfringing alternatives, *or if there were, that Arlington lost some sales as a result of the infringing activity*; three, that Arlington had the manufacturing and marketing capacity to make any infringing sales ac[tually] made by Bridgeport; and four, the amount of profit Arlington would have made if Bridgeport had not infringed.

(Doc. 663 at 140-41 (emphasis added)). According to Bridgeport, the emphasized portion of the instruction was contrary to “the black-letter rule of patent law requiring the patent owner to demonstrate a lack of acceptable non-infringing substitutes,” (Doc. 690 at 59), and was inconsistent with “*all* accepted model jury instructions,” (Doc. 754 at 35).

The instruction set forth above is taken from the model lost profits instruction provided in “The National Patent Jury Instructions,” a set of model jury instructions published in June 2009 by The National Jury Instruction Project. See THE NAT’L JURY INSTRUCTION PROJECT, MODEL PATENT JURY INSTRUCTIONS 62 (2009), <http://www.nationaljuryinstructions.org/documents/NationalPatentJuryInstructions.pdf>. These instructions were created by a committee, the members of which were assembled by Chief Judge Paul R. Michel of the Federal Circuit Court of Appeals. Although these instructions have not been endorsed by the Federal Circuit, the court found the lost profits instructions to be an accurate statement of the law and to clearly articulate the appropriate standard. (See Doc. 662 at 335.)

When a litigant moves for a new trial based upon jury instructions that allegedly contained legal error, the district court is tasked with determining whether the instructions, in their entirety, properly apprised the jury of the issues and applicable law. Donlin v. Philips Lighting N. Am. Corp., 581 F.3d 73, 78 (3d Cir. 2009). If the instruction in question was erroneous, the court must then ascertain “whether that error was so prejudicial that refusal to grant a new trial would be

‘inconsistent with substantial justice.’” Bhaya v. Westinghouse Elec. Corp., 709 F. Supp. 600, 601 (E.D. Pa. 1989) (quoting FED. R. CIV. P. 61). In the instant matter, the instruction on lost profits was legally correct. It informed the jury that if Arlington demonstrates the lack of acceptable non-infringing substitutes, it could infer that but for Bridgeport’s infringement, Arlington would have made all of Bridgeport’s sales. See Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1548 (Fed. Cir. 1995). If, however, Arlington failed to show that there were no acceptable non-infringing substitutes, evidence of lost sales would be necessary to establish lost profits. See id. (explaining that if an acceptable substitute product exists in the market, a patentee must prove its customers would not have obtained that substitute from another seller in order to prove the second Panduit factor).²⁵ Thus, the instruction in question appropriately reflected the law pertaining to lost profits and Bridgeport’s motion for a new trial on lost profits will be denied.

IV. Conclusion

After a ten-day trial in the above-captioned matter, a jury found that twenty-nine Whipper-Snap connector models literally infringed claim 8 of the ‘050 patent. In addition, the jury concluded that one model, the 802ASP, infringed claim 8 under the doctrine of equivalents. For the foregoing reasons, the jury’s verdict of infringement shall be upheld. However, the court will grant Bridgeport’s renewed

²⁵ The evidence was more than sufficient for the jury to conclude that the market contained no acceptable non-infringing substitutes. As such, resort to lost profits was unnecessary.

motion for judgment as a matter of law with respect to the jury's finding of willfulness, for Bridgeport presented a reasonable position on claim construction which demonstrated that its conduct was not objectively unreasonable. The court shall also sustain the jury's verdict holding twenty-six connector models in breach of the settlement agreement entered between the parties in 2004. Finally, there was ample evidence to support the verdict on profits lost due to Bridgeport's infringement and breach of contract, and neither of these conclusions was the result of an error of law.

An appropriate follows.

S/ Christopher C. Conner
CHRISTOPHER C. CONNER
United States District Judge

Dated: March 2, 2010

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

ARLINGTON INDUSTRIES, INC.,	:	CIVIL ACTION NO. 3:01-CV-0485
	:	
Plaintiff	:	(CONSOLIDATED)
	:	
v.	:	(Judge Conner)
	:	
BRIDGEPORT FITTINGS, INC.,	:	
	:	
Defendant	:	

BRIDGEPORT FITTINGS, INC.,	:	
	:	
Consolidated Plaintiff	:	
	:	
v.	:	
	:	
ARLINGTON INDUSTRIES, INC.,	:	
	:	
Consolidated Defendant	:	

ORDER

AND NOW, this 2nd day of March, 2010, upon consideration of the motion (Doc. 647) for renewed judgment as a matter of law and the motion (Doc. 642) for a new trial, filed by Bridgeport Fittings, Incorporated, and for the reasons set forth in the accompanying memorandum, it is hereby ORDERED that:

1. The motion (Doc. 647) for renewed judgment as a matter of law is GRANTED in part and DENIED in part as follows:
 - a. The motion (Doc. 647) is GRANTED with respect to Question 4 of the jury verdict, adjudging Bridgeport liable for willful infringement. This aspect of the jury verdict is VACATED.
 - b. The motion (Doc. 647) is DENIED in all other respects.

2. The motion (Doc. 642) for a new trial is **CONDITIONALLY GRANTED** in part and **DENIED** in part as follows:
 - a. The motion (Doc. 642) is **CONDITIONALLY GRANTED** with respect to Question 4 of the jury verdict, adjudging Bridgeport liable for willful infringement. See FED. R. CIV. P. 50(c)(1).
 - b. The motion is **DENIED** in all other respects.

S/ Christopher C. Conner
CHRISTOPHER C. CONNER
United States District Judge